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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Sean R. Parent

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EXAMINER

MEUCCI, MICHAEL D

ART UNIT

PAPER NUMBER

2142

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/965,117

Applicant(s)

PARENT ET AL.

Examiner

Michael D. Meucci

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 21-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 21-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____   | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

In view of the appeal brief filed on 19 May 2006, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, Applicant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then Applicant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

Because new grounds of rejection are being made, this action is **non-final**.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 4, 6-8, 10-13, 23-25 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stent (U.S. 5,778,359) in view of Backlund (OOE: A Compound Document Framework) and Zdybel, Jr. et al. (U.S. 5,486,686) hereinafter referred to as Zdybel.

a. With respect to claim 1, Stent discloses receiving a foreign data block (col. 3, lines 9-11); determining characteristics of the foreign data block, including a character encoding format of the foreign data block (col. 2, lines 1-6); and generating packing data that describes the characteristics of the foreign data block, including data marking the beginning (col. 3, lines 50-52; col. 5, lines 16-18) and end of the foreign data block (col. 3, lines 53-54) and further including an identifier designed to be distinguishable from all other data in the host data file (col. 2, line 9 and col. 3, lines 49-56), wherein generating packing data includes selecting, based on the character encoding format of the foreign data block, a byte pattern that indicates a presence of a header, and including the byte pattern in the packing data (col. 3, lines 50-52 and col. 5, lines 12-19).

Stent does not expressly disclose receiving a host data file, the host data file having a host data file format; embedding the packing data and the foreign data block as a foreign data block packet in the host data file.

Backlund teaches a host data file having a host data file format (p. 2, lines 23-24) into which foreign files can be embedded wherein the foreign data block is identifiable, extractable, and modifiable by application programs that are not configured to recognize the host file data format (p. 2, lines 29-33).

Stent and Backlund are analogous art because they are both from the same field of endeavor of document processing.

At the time of invention it would have been obvious to a person of ordinary skill in the art to use Stent's method of encapsulating data to produce packets that could be embedded into a host file using Backlund's method of creating compound documents. The motivation for doing so would have been to provide Backlund's method with packets that contain a large amount of information about the contained data.

Therefore it would have been obvious to combine Backlund with Stent for the benefit of packets containing a large amount of data to obtain the invention as specified in claim 1.

Stent does not explicitly teach: generating packing data includes selecting, based on the character encoding format of the foreign data block, a byte pattern that indicates a presence of a header, and including the byte pattern in the packing data. However, Zdybel discloses: "Plain text ASCII encoding is becoming a de facto interchange standard, but it is of limited utility for representing structured electronic documents.

Other encoding formats provide fuller structural representations of electronic documents, but they usually are relatively system specific. For example, some of the more basic document description languages (DDLs) employ embedded control codes for supplementing ASCII encodings with variables defining the logical structure (i.e., the sections, paragraphs, sentences, figures, figure captions, etc.) of electronic documents, thereby permitting such documents to be formatted in accordance with selected formatting variables, such as selected font styles, font sizes, line and paragraph spacings, margins, indentations, header and footer locations, and columns," (lines 48-62 of column 1). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have generating packing data include selecting, based on the character encoding format of the foreign data block, a byte pattern that indicates a presence of a header, and including the byte pattern in the packing data. "Graphical DDL encodings provide more sophisticated and complete representations of electronic document structures because they encode both the logical structure and the layout structure of such documents. Page description language (PDL) encodings are related to graphical DDL encodings, but they are designed so that they can be readily decomposed or interpreted to define the detailed layout of the printed page in a raster scan format. Accordingly, it will be appreciated that the transportability of electronic documents from one document processing system to another depends upon the ability of the receiving or "target" system to interpret, either directly or through the use of a format converter, the encoding format in which the document is provided by the originating or "source" system. To simplify this disclosure, source/target encoding

format compatibility will be assumed, but it should be clearly understood that this is a simplifying assumption," (line 62 of column 1 through line 11 of column 2). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have generating packing data include selecting, based on the character encoding format of the foreign data block, a byte pattern that indicates a presence of a header, and including the byte pattern in the packing data in the system as taught by Stent.

b. With respect to claims 2 and 23, Stent further discloses that generating packing data includes generating the header for the foreign data block, the header including the byte pattern and the identifier and indicating the beginning of the foreign data block packet (col. 3, line 50-56) and the beginning of the foreign data block (col. 3, lines 50-52; col. 5, lines 16-18).

c. With respect to claims 4 and 24, Stent further discloses that generating packing data includes generating a trailer for the foreign data block, the trailer indicating the end of the foreign data block (col. 3, lines 53-54).

d. With respect to claims 6 and 25, Stent further discloses including padding in the foreign data block packet to allow in-place modifications of the foreign data block that cause the foreign data block to expand (col. 4, line 7).

e. With respect to claim 7, Stent further discloses that determining characteristics of the foreign data block includes determining a size of the foreign data block (col. 4, lines 3-5); and the amount of padding is a function of the size of the foreign data block (col. 4, lines 5-7).

f. With respect to claim 8, Backlund further discloses that the foreign data block is a data block not native to the host file format (p. 2, lines 16-18).

g. With respect to claims 10 and 27, Stent further discloses that determining characteristics of the foreign data block includes determining a byte order of the foreign data block (col. 4, lines 21-23); and generating a header includes generating information for specifying the byte order and character encoding format of the foreign data block, the character encoding format being one of an 8, 16, or 32 bit Unicode format (col. 4, lines 32-33).

h. With respect to claims 11 and 28, Stent further disclose that generating an identifier includes generating a different identifier for each different type of foreign data block when there are multiple types of foreign data blocks in the host data file (col. 2, lines 7-9).

i. With respect to claim 12, Stent further discloses that the foreign data block includes metadata information that describes the host data file (col. 2, lines 7-9).

j. With respect to claim 13, Backlund further discloses that receiving a host data file includes receiving a host data file having a non-XML format (p. 2, line 16).

3. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stent (U.S. 5,778,359) in view of Lonnroth et al. (U.S. 6,826,597 B1) hereinafter referred to as Lonnroth and Zdybel.

a. With respect to claim 14, Stent discloses: search for a header (col. 2, lines 19-21) that indicates the beginning of an embedded foreign data block packet that



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contains a foreign data block (col. 3, lines 50-52), the foreign data block having a format that is recognizable by the computer program (col. 2, lines 7-9), the header including an identifier designed to be distinguishable from all other data in the host data file (col. 2, line 9 and col. 5, lines 47-52), the header further describing the characteristics of the foreign data block (col. 3, lines 50-51), wherein searching for the header comprises: scanning byte by byte for a byte pattern that indicates a presence of a header (col. 3, lines 49-56), and when the byte pattern is found, determine a character encoding format of the header and scan character by character using the character encoding format to search for the identifier, and if the identifier is found, process the header or, if an identifier is not found, scan a remaining portion of the host data file byte by byte for the byte stream (col. 3, lines 49-56 and col. 5, lines 12-19).

Stent teaches receiving a host data file, but does not explicitly teach the host data file having a host data file format that is not understood by the computer program product, but provides evidence for such on col. 1, line 66 – col. 2, line 1. Lonroth does teach receiving a host data file wherein the host data file has a host data file format that is not understood by the computer program product. “The present invention relates to providing services to clients and, more specifically, to providing clients with services that retrieve data from data sources that do not necessarily support the format required by the clients,” (lines 20-23 of column 1). It would have been obvious to one of ordinary skill in the art at the time of the applicant’s invention to have a data file with a host data file format that is not understood by the computer program product. “In one embodiment, the request objects are XML-structured documents with unresolved links

to the data sources that have information required by the clients. An XML processor resolves the links by issuing requests through one or more gateways. The gateways convert the responses received from the data sources into XML, which the XML processor uses to create XML composite response documents. A post-processor filters the XML response documents, and applies XSL stylesheets to transform the XML composite response documents into client-specific responses that conform to the format required by the clients," (lines 19-30 of column 3 in Lonnroth). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have a data file with a host data file format that is not understood by the computer program product and also be able to utilize this information in the system as taught by Stent.

Stent does not explicitly teach: scanning byte by byte for a byte pattern that indicates a presence of a header; and when the byte pattern is found, determining a character encoding format of the header and scan character by character using the character encoding format to search for the identifier, and if the identifier is found, process the header or, if an identifier is not found, scan a remaining portion of the host data file byte by byte for the byte pattern. However, Zdybel discloses: "Plain text ASCII encoding is becoming a de facto interchange standard, but it is of limited utility for representing structured electronic documents. Other encoding formats provide fuller structural representations of electronic documents, but they usually are relatively system specific. For example, some of the more basic document description languages (DDLs) employ embedded control codes for supplementing ASCII encodings with

variables defining the logical structure (i.e., the sections, paragraphs, sentences, figures, figure captions, etc.) of electronic documents, thereby permitting such documents to be formatted in accordance with selected formatting variables, such as selected font styles, font sizes, line and paragraph spacings, margins, indentations, header and footer locations, and columns," (lines 48-62 of column 1). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to scan byte by byte for a byte pattern that indicates a presence of a header; and when the byte pattern is found, determine a character encoding format of the header and scan character by character using the character encoding format to search for the identifier, and if the identifier is found, process the header or, if an identifier is not found, scan a remaining portion of the host data file byte by byte for the byte pattern. "Graphical DDL encodings provide more sophisticated and complete representations of electronic document structures because they encode both the logical structure and the layout structure of such documents. Page description language (PDL) encodings are related to graphical DDL encodings, but they are designed so that they can be readily decomposed or interpreted to define the detailed layout of the printed page in a raster scan format. Accordingly, it will be appreciated that the transportability of electronic documents from one document processing system to another depends upon the ability of the receiving or "target" system to interpret, either directly or through the use of a format converter, the encoding format in which the document is provided by the originating or "source" system. To simplify this disclosure, source/target encoding format compatibility will be assumed, but it should be clearly understood that this is a

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simplifying assumption,” (line 62 of column 1 through line 11 of column 2). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to scan byte by byte for a byte pattern that indicates a presence of a header; and when the byte pattern is found, determine a character encoding format of the header and scan character by character using the character encoding format to search for the identifier, and if the identifier is found, process the header or, if an identifier is not found, scan a remaining portion of the host data file byte by byte for the byte pattern in the system as taught by Stent.

b. With respect to claim 15, Stent discloses instructions to process the foreign data block (col. 2, lines 26-27).

c. With respect to claim 16, Stent discloses instructions to stop processing the foreign data block when a trailer is detected, wherein the trailer indicates the end of the foreign data block (col. 3, lines 53-54).

4. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stent and Lonnroth as applied to claim 16 above, further in view of Backlund.

a. With respect to claim 17, Stent discloses instructions to ensure that the modified foreign data block fits in the foreign data block packet (col. 4, lines 7-9).

Stent does not expressly disclose instructions to modify the foreign data clock as specified by a user; and re-embed the modified foreign data block in place of the original foreign data block.

Backlund discloses the capability to allow user modifications of a foreign data block (p. 2, lines 29-30) and that the modified data block can be re-embedded in place of the original data block (p. 8, lines 3-7).

Stent and Backlund are analogous art because they are both from the same field of endeavor of document processing.

At the time of invention it would have been obvious to a person of ordinary skill in the art to use Stent's method of processing data to produce packets that could be embedded into a host file using Backlund's method of creating and modifying compound documents. The motivation for doing so would have been to provide Backlund's method with packets that contain a large amount of information about the contained data.

Therefore it would have been obvious to combine Backlund with Stent for the benefit of packets containing a large amount of data to obtain the invention as specified in claim 17.

b. With respect to claim 18, Stent discloses instructions to ensure that the re-written foreign data block packet is the same size as the original foreign data block packet (col. 4, lines 7-9).

Stent does not expressly disclose instructions to modify the foreign data clock as specified by a user; rewrite the foreign data block packet; and re-embed the modified foreign data block in place of the original foreign data block.

Backlund discloses the capability to allow user modifications of a foreign data block (p. 2, lines 29-30), the capability to rewrite the foreign data block packet (p. 8, line

5), and that the modified data block can be re-embedded in place of the original data block packet (p. 8, lines 3-7).

Stent and Backlund are analogous art because they are both from the same field of endeavor of document processing.

At the time of invention it would have been obvious to a person of ordinary skill in the art to use Stent's method of processing data to produce packets that could be embedded into a host file using Backlund's method of creating and modifying compound documents. The motivation for doing so would have been to provide Backlund's method with packets that contain a large amount of information about the contained data.

Therefore it would have been obvious to combine Backlund with Stent for the benefit of packets containing a large amount of data to obtain the invention as specified in claim 18.

5. Claims 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Backlund (OOE: A Compound Document Framework) in view of Stent (5,778,359).

a. With respect to claim 19, Backlund discloses a method for embedding a foreign data block in a host data file, comprising:

receiving a host data file, the host data file having a host data format (p. 2, lines 23-24);

receiving a packet to be embedded into the host data file (p. 2, lines 27-28);

embedding the packet in the host data file (p. 2, lines 29-33);

whereby the foreign data block is identifiable, extractable, and modifiable by computer programs not configured to recognize the host file data format (p. 2, lines 29-30).

Backlund does not expressly disclose that the foreign data block includes a header and a trailer that delimit the foreign data block, the header including an identifier designed to be distinguishable from all other data in the host data file.

Stent discloses a header (col. 3, lines 50-52; col. 5, lines 16-18) and a trailer that delimit the foreign data block (col. 3, lines 53-54) and an identifier designed to be distinguishable from all other data in the host data file (col. 2, line 9).

Stent and Backlund are analogous art because they are both from the same field of endeavor of document processing.

At the time of invention it would have been obvious to a person of ordinary skill in the art to use Stent's method of encapsulating data to produce packets that could be embedded into a host file using Backlund's method of creating compound documents. The motivation for doing so would have been to provide Backlund's method with packets that contain a large amount of information about the contained data.

Therefore it would have been obvious to combine Backlund with Stent for the benefit of packets containing a large amount of data to obtain the invention as specified in claim 19.

b. With respect to claim 20, Backlund discloses A computer program product, tangibly stored on a machine-readable medium, for embedding a foreign data

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block in a host data file, comprising instructions operable to cause a programmable processor to:

receive a host data file, the host data file having a host data format that is a native file format for the computer program product (p. 2, lines 23-24);

receive a packet to be embedded into the host data file, the packet including a foreign data block that is not native to the host data file format (p. 2, lines 27-28); and

embed the packet in the host data file (p. 2, lines 29-33);

whereby the foreign data block is identifiable, extractable, and modifiable by computer programs not configured to recognize the host file data format (p. 2, lines 29-30).

Backlund does not expressly disclose a header and a trailer that delimit the foreign data block, the header including an identifier that is designed to be distinguishable from all other data in the host data file.

Stent discloses a header (col. 3, lines 50-52; col. 5, lines 16-18) and a trailer that delimit the foreign data block (col. 3, lines 53-54) and an identifier designed to be distinguishable from all other data in the host data file (col. 2, line 9).

Stent and Backlund are analogous art because they are both from the same field of endeavor of document processing.

At the time of invention it would have been obvious to a person of ordinary skill in the art to use Stent's method of encapsulating data to produce packets that could be embedded into a host file using Backlund's method of creating compound documents.



The motivation for doing so would have been to provide Backlund's method with packets that contain a large amount of information about the contained data.

Therefore it would have been obvious to combine Backlund with Stent for the benefit of packets containing a large amount of data to obtain the invention as specified in claim 20.

c. With respect to claim 21, Backlund discloses a computer program product, tangibly stored on a machine-readable medium, for embedding a foreign data block in a host data file, comprising instructions operable to cause a programmable processor to:

receive a host data file, the host data file having a host data file format that is a native file format for a host application (p. 2, lines 23-24);

receive a foreign data block, the foreign data block being a data block that is not native to the host data file format (p. 2, lines 27-28); and

embed the information and the foreign data block as a foreign data block packet in the host data file (p. 2, lines 29-33).

Backlund does not disclose instructions to generate information that describes the characteristics of the foreign data block, including information marking the beginning and end of the foreign data block and further including an identifier designed to be distinguishable from all other data in the host data file.

Stent discloses instructions for determining characteristics of the foreign data block including a character encoding format of the foreign data block (col. 2, lines 1-6, col. 3, lines 49-56) and information identifying the beginning and end of the foreign data block (col. 3, lines 50-52; col. 5, lines 16-18; col. 3, lines 53-54) and an identifier

designed to be distinguishable from all other data in the host data file (col. 2, line 9), wherein generating information identifying the beginning of the foreign data block includes selecting, based on the character encoding format, a byte pattern that indicates a presence of the information marking the beginning of the foreign data block (col. 3 lines 49-56, col. 5, lines 12-19, col. 5, lines 39-52).

Stent and Backlund are analogous art because they are both from the same field of endeavor of document processing.

At the time of invention it would have been obvious to a person of ordinary skill in the art to use Stent's instructions for encapsulating data to produce packets that could be embedded into a host file using Backlund's program for creating compound documents. The motivation for doing so would have been to provide Backlund's method with packets that contain a large amount of information about the contained data.

Therefore it would have been obvious to combine Backlund with Stent for the benefit of packets containing a large amount of data to obtain the invention as specified in claim 21.

Stent does not explicitly teach: scanning byte by byte for a byte pattern that indicates a presence of a header; and when the byte pattern is found, determining a character encoding format of the header and scan character by character using the character encoding format to search for the identifier, and if the identifier is found, process the header or, if an identifier is not found, scan a remaining portion of the host data file byte by byte for the byte pattern. However, Zdybel discloses: "Plain text ASCII

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encoding is becoming a de facto interchange standard, but it is of limited utility for representing structured electronic documents. Other encoding formats provide fuller structural representations of electronic documents, but they usually are relatively system specific. For example, some of the more basic document description languages (DDLs) employ embedded control codes for supplementing ASCII encodings with variables defining the logical structure (i.e., the sections, paragraphs, sentences, figures, figure captions, etc.) of electronic documents, thereby permitting such documents to be formatted in accordance with selected formatting variables, such as selected font styles, font sizes, line and paragraph spacings, margins, indentations, header and footer locations, and columns," (lines 48-62 of column 1). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to scan byte by byte for a byte pattern that indicates a presence of a header; and when the byte pattern is found, determine a character encoding format of the header and scan character by character using the character encoding format to search for the identifier, and if the identifier is found, process the header or, if an identifier is not found, scan a remaining portion of the host data file byte by byte for the byte pattern. "Graphical DDL encodings provide more sophisticated and complete representations of electronic document structures because they encode both the logical structure and the layout structure of such documents. Page description language (PDL) encodings are related to graphical DDL encodings, but they are designed so that they can be readily decomposed or interpreted to define the detailed layout of the printed page in a raster scan format. Accordingly, it will be appreciated that the transportability of electronic

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documents from one document processing system to another depends upon the ability of the receiving or "target" system to interpret, either directly or through the use of a format converter, the encoding format in which the document is provided by the originating or "source" system. To simplify this disclosure, source/target encoding format compatibility will be assumed, but it should be clearly understood that this is a simplifying assumption," (line 62 of column 1 through line 11 of column 2). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to scan byte by byte for a byte pattern that indicates a presence of a header; and when the byte pattern is found, determine a character encoding format of the header and scan character by character using the character encoding format to search for the identifier, and if the identifier is found, process the header or, if an identifier is not found, scan a remaining portion of the host data file byte by byte for the byte pattern in the system as taught by Stent.

d. With respect to claim 22, Backlund discloses a computer program product, tangibly stored on a machine-readable medium, for embedding metadata in a host data file having a non-XML format, comprising instructions operable to cause a programmable processor to:

receive a host data file having a format that is not XML and that is a native file format for a host application (p. 2, lines 23-24, 16);

receive metadata having a format that is not native to the host data file format (p. 2, lines 27-28); and

embed the information and the metadata as a packet in the host data file (p. 2, lines 29-33);

Backlund does not expressly disclose instructions to determine characteristics of the metadata including a character encoding format of the metadata and generate information that describes the characteristics of the metadata, including information identifying the beginning and end of the metadata and further including an identifier designed to be distinguishable from all other data in the host data file, wherein generating information identifying the beginning of the metadata includes selecting, based on the character encoding format, a byte pattern that indicates a presence of the information marking the beginning of the metadata.

Stent discloses instructions to determine characteristics of the metadata (col. 2, line 1) and information marking the beginning and end of the metadata (col. 3, lines 50-52; col. 5, lines 16-18; col. 3, lines 53-54) and an identifier designed to be distinguishable from all other data in the host data file (col. 2, line 9).

Stent and Backlund are analogous art because they are both from the same field of endeavor of document processing.

At the time of invention it would have been obvious to a person of ordinary skill in the art to use Stent's instructions for encapsulating data to produce packets that could be embedded into a host file using Backlund's program for creating compound documents. The motivation for doing so would have been to provide Backlund's method with packets that contain a large amount of information about the contained data.

Therefore it would have been obvious to combine Backlund with Stent for the benefit of packets containing a large amount of data to obtain the invention as specified in claim 22.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stent in view of Backlund as applied to claims 1 and 2 above, and further in view of Erickson (2004/0210535) and Parks (6,850,228).

Stent and Backlund do not expressly disclose a header that indicates the end of the foreign data block packet.

Erickson indicates that the data block can be at the end of an encapsulated document (par. 93). Parks shows that a header can indicate the length (and therefore the end) of a data block (col. 2, line 16). If the data block is at the end of the document, as taught by Erickson, the Parks' length would indicate the end of the document. Therefore, Erickson and Parks show that a header can indicate the end of a foreign data block packet.

Stent, Backlund, Erickson, and Parks are all analogous art because they are all from the same field of endeavor of document processing.

At the time of invention it would have been obvious to a person of ordinary skill in the art to allow Stent's method to include a header that indicates the end of the foreign data block packet. The motivation for doing so would have been to indicate to Backlund's method the end of the packet to be embedded.

Therefore it would have been obvious to combine Erickson and Parks with Stent and Backlund for the benefit of additional information about the packet to be embedded to obtain the invention as specified in claim 3.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stent in View of Backlund as applied to claims 1 and 2 above, and further in view of Parks (6,850,228).

Stent and Backlund do not expressly disclose a header that indicates the end of the foreign data block.

Parks teaches that headers can indicate the length, and therefore the end, of a data block (col. 2, line 16).

Stent, Backlund, and Parks are all analogous art because they are all from the same field of endeavor of document processing.

At the time of invention it would have been obvious to a person of ordinary skill in the art to allow Stent's method to include a header that indicates the end of the foreign data block. The motivation for doing so would have been to indicate to Backlund's method the end of the block to be embedded.

Therefore it would have been obvious to combine Parks with Stent and Backlund for the benefit of additional information about the block to be embedded to obtain the invention as specified in claim 5.

8. Claims 9 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stent in view of Backlund as applied to claims 1 and 21 above, and further in view of Walsh (6,810,429).

Backlund discloses that the host file is in a non-XML format (p. 2, line 16).

Stent and Backlund do not expressly disclose that the foreign data block is an XML document.

Walsh discloses that XML documents can be embedded into documents of a different type (col. 13, lines 18-20).

Stent, Backlund, and Walsh are all analogous art because they are all from the same field of endeavor of document processing.

At the time of invention it would have been obvious to allow Backlund's method to accept an XML document as a document to be embedded into a non-XML file. The motivation for doing so would have been to broaden the types of files that Backlund's method can accept as embedded data.

Therefore it would have been obvious to combine Walsh with Stent and Backlund for the benefit of broadening the types of files that Backlund's method can accept to obtain the invention as specified in claims 9 and 26.

### ***Response to Arguments***

9. Applicant's arguments, see appeal brief, filed 31 July 2006, with respect to selecting a byte pattern that indicates a presence of a header based on the character



encoding format of the foreign data block in claim 1 have been fully considered and are persuasive. The previous rejection of claim 1 has been withdrawn.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shaw et al. (U.S. 5,706,290) discloses selection of formatting for multimedia encoding.

Hogan (U.S. 6,064,748) discloses embedding and retrieving data in an encoded data stream.

Zehavi (U.S. 6,496,543 B1) discloses encoding data using a selected encoding format and combining the encoded symbols of the header message with the encoded symbols of data


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Meucci at (571) 272-3892. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell, can be reached at (571) 272-3868. The fax phone number for this Group is 571-273-8300.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [michael.meucci@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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